David StJohn

List of Publications by Year
in descending order

207 papers	14,944 citations	30551 56 h-index	23841 115 g-index
222 all docs	222 docs citations	222 times ranked	6365 citing authors

#	Article	IF	Citations
1	Demonstrating the roles of solute and nucleant in grain refinement of additively manufactured aluminium alloys. Additive Manufacturing, 2022, 49, 102516.	1.7	7
2	Niobium nanoparticle-enabled grain refinement of a crack-free high strength Al-Zn-Mg-Cu alloy manufactured by selective laser melting. Journal of Alloys and Compounds, 2022, 900, 163427.	2.8	25
3	Current understanding of the origin of equiaxed grains in pure metals during ultrasonic solidification and a comparison of grain formation processes with low frequency vibration, pulsed magnetic and electric-current pulse techniques. Journal of Materials Science and Technology, 2021, 65, 38-53.	5.6	26
4	Grain refinement of stainless steel in ultrasound-assisted additive manufacturing. Additive Manufacturing, 2021, 37, 101632.	1.7	29
5	Revealing the mechanisms for the nucleation and formation of equiaxed grains in commercial purity aluminum by fluid-solid coupling induced by a pulsed magnetic field. Acta Materialia, 2021, 208, 116747.	3.8	30
6	Investigating the Grain Refinement Mechanisms of Pulsed Electric Current, Ultrasonic and Melt Stirring Solidification of Pure Aluminium. Jom, 2021, 73, 3873-3882.	0.9	5
7	Peritectic phase formation kinetics of directionally solidifying Sn-Cu alloys within a broad growth rate regime. Acta Materialia, 2021, 220, 117295.	3.8	13
8	Effect of Cooling Rate on the Grain Refinement of Mg-Y-Zr Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 482-496.	1.1	22
9	Improved biodegradable magnesium alloys through advanced solidification processing. Scripta Materialia, 2020, 177, 234-240.	2.6	20
10	Grain refinement of hypoeutectic Al-7wt.%Si alloy induced by an Alâ€“Vâ€“B master alloy. Journal of Alloys and Compounds, 2020, 812, 152022.	2.8	34
11	Grain structure control during metal 3D printing by high-intensity ultrasound. Nature Communications, 2020, 11, 142.	5.8	416
12	Understanding the refinement of grains in laser surface remelted Alâ€“Cu alloys. Scripta Materialia, 2020, 178, 447-451.	2.6	59
13	Titanium sponge as a source of native nuclei in titanium alloys. Journal of Alloys and Compounds, 2020, 818, 153353.	2.8	3
14	Properties of Powder Metallurgyâ€Fabricated Oxygenâ€Containing Beta Tiâ€“Nbâ€“Moâ€“Snâ€Fe Alloys for Biomedical Applications. Advanced Engineering Materials, 2020, 22, 1901229.	1.6	5
15	A comparative study of the role of solute, potent particles and ultrasonic treatment during solidification of pure Mg, Mgâ€“Zn and Mgâ€“Zr alloys. Journal of Magnesium and Alloys, 2020, , .	5.5	23
16	On the distribution of the trace elements V and Cr in an Alâ€“Znâ€“Si alloy coating on a steel substrate. Materialia, 2020, 11, 100669.	1.3	2
17	A rational interpretation of solidification microstructures in the Mg-rich corner of the Mgâ€“Alâ€“La system. Journal of Alloys and Compounds, 2020, 844, 156068.	2.8	4
18	The Influence of In-Cavity Pressure on Heat Transfer and Porosity Formation During High-Pressure Die Casting of A380 Alloy. Jom, 2020, 72, 3798-3805.	0.9	6

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19	Towards understanding grain nucleation under Additive Manufacturing solidification conditions. Acta Materialia, 2020, 195, 392-403.	3.8	127
20	Refining prior-Î² grains of Tiâ€"6Alâ€"4V alloy through yttrium addition. Journal of Alloys and Compounds, 2020, 841, 155733.	2.8	24
21	Grain refinement in laser remelted Mg-3Nd-1Gd-0.5Zr alloy. Scripta Materialia, 2020, 183, 12-16.	2.6	35
22	Revealing the Mechanisms of Grain Nucleation and Formation During Additive Manufacturing. Jom, 2020, 72, 1065-1073.	0.9	66
23	Metal injection moulding of surgical tools, biomaterials and medical devices: A review. Powder Technology, 2020, 364, 189-204.	2.1	55
24	Ultrasonic Processing for Structure Refinement: An Overview of Mechanisms and Application of the Interdependence Theory. Materials, 2019, 12, 3187.	1.3	14
25	The Role of Ultrasonically Induced Acoustic Streaming in Developing Fine Equiaxed Grains During the Solidification of an Al-2ÂPct Cu Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 5253-5263.	1.1	14
26	Tensile Properties and Fracture Behaviour of Biodegradable Ironâ€"Manganese Scaffolds Produced by Powder Sintering. Materials, 2019, 12, 1572.	1.3	6
27	A new approach to nuclei identification and grain refinement in titanium alloys. Journal of Alloys and Compounds, 2019, 794, 268-284.	2.8	24
28	An in situ investigation of the solute suppressed nucleation zone in an Al-15â€¯wt% Cu alloy inoculated by Al-Ti-B. Scripta Materialia, 2019, 167, 6-10.	2.6	47
29	Effect of ultrasonic melt treatment on intermetallic phase formation in a manganese-modified Al-17Si-2Fe alloy. Journal of Materials Processing Technology, 2019, 271, 346-356.	3.1	20
30	Cellular Automation Finite Element Modeling of the Evolution of the As-Cast Microstructure of an Ultrasonically Treated Al-2Cu Alloy. Minerals, Metals and Materials Series, 2019, , 1617-1622.	0.3	0
31	Promoting the columnar to equiaxed transition and grain refinement of titanium alloys during additive manufacturing. Acta Materialia, 2019, 168, 261-274.	3.8	434
32	Effect of ultrasonic treatment on the alloying and grain refinement efficiency of a Mg â€" Zr master alloy added to magnesium at hypo- and hyper-peritectic compositions. Journal of Crystal Growth, 2019, 512, 20-32.	0.7	37
33	Effect of Zn addition on Cu3Sn formation in Sn-10Cu alloys. IOP Conference Series: Materials Science and Engineering, 2019, 701, 012009.	0.3	3
34	Numerical simulation of wave-like nucleation events. IOP Conference Series: Materials Science and Engineering, 2019, 529, 012043.	0.3	2
35	Additive manufacturing of ultrafine-grained high-strength titanium alloys. Nature, 2019, 576, 91-95.	13.7	575
36	The Poisoning Effect of Al and Be on Mgâ€"1 wt.% Zr Alloy and the Role of Ultrasonic Treatment on Grain Refinement. Frontiers in Materials, 2019, 6, .	1.2	7

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37	A New Perspective on the Nucleation, Growth Morphology and Modification of the Silicon Phase During the Formation of Eutectic Al-Si Grains. Jom, 2019, 71, 391-396.	0.9	2
38	Investigating the morphological effects of solute on the Î²-phase in as-cast titanium alloys. Journal of Alloys and Compounds, 2019, 778, 204-214.	2.8	9
39	Recent Developments in the Application of the Interdependence Model of Grain Formation and Refinement. Minerals, Metals and Materials Series, 2018, , 315-322.	0.3	0
40	Metal injection moulding of non-spherical titanium powders: Processing, microstructure and mechanical properties. Journal of Manufacturing Processes, 2018, 31, 416-423.	2.8	34
41	Heterogeneous nucleation of pure Al on MgO single crystal substrate accompanied by a MgAl2O4 buffer layer. Journal of Alloys and Compounds, 2018, 753, 543-550.	2.8	20
42	Sensitivity of Ti-6Al-4V components to oxidation during out of chamber Wireâ€‑+â€‑Arc Additive Manufacturing. Journal of Materials Processing Technology, 2018, 258, 29-37.	3.1	59
43	Do sustainability rating tools deliver the best outcomes in master planned urban infill projects? City to the Lake experience. Australian Planner, 2018, 55, 84-92.	0.6	4
44	Grain refinement of laser remelted Al-7Si and 6061 aluminium alloys with TiborÂ® and scandium additions. Journal of Manufacturing Processes, 2018, 35, 715-720.	2.8	46
45	Porous Titanium Scaffolds Fabricated by Metal Injection Moulding for Biomedical Applications. Materials, 2018, 11, 1573.	1.3	16
46	Ultrasonic Processing of Aluminumâ€“Magnesium Alloys. Materials, 2018, 11, 1994.	1.3	9
47	Revealing the microstructural stability of a three-phase soft solid (ice cream) by 4D synchrotron X-ray tomography. Journal of Food Engineering, 2018, 237, 204-214.	2.7	25
48	Trace Carbon Addition to Refine Microstructure and Enhance Properties of Additive-Manufactured Ti-6Al-4V. Jom, 2018, 70, 1670-1676.	0.9	57
49	Suppression of Cu3Sn in the Sn-10Cu peritectic alloy by the addition of Ni. Journal of Alloys and Compounds, 2018, 766, 1003-1013.	2.8	19
50	The effect of ultrasonic treatment on the mechanisms of grain formation in as-cast high purity zinc. Journal of Crystal Growth, 2018, 495, 20-28.	0.7	24
51	Evolution of the Asâ€Cast Grain Microstructure of an Ultrasonically Treated Alâ€“2Cu Alloy. Advanced Engineering Materials, 2018, 20, 1800521.	1.6	7
52	Treatment by External Fields. , 2018, , 279-332.		4
53	Casting of Light Alloys. , 2017, , 109-156.		8
54	Cast Aluminium Alloys. , 2017, , 265-286.		0

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55	Simulation of convective flow and thermal conditions during ultrasonic treatment of an Al-2Cu alloy. Computational Materials Science, 2017, 134, 116-125.	1.4	49
56	Synchrotron X-ray tomographic quantification of microstructural evolution in ice cream â€“ a multi-phase soft solid. RSC Advances, 2017, 7, 15561-15573.	1.7	34
57	The Effect of Ultrasonic Melt Treatment on Macro-Segregation and Peritectic Transformation in an Al-19Si-4Fe Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 5579-5590.	1.1	31
58	Role of ultrasonic treatment, inoculation and solute in the grain refinement of commercial purity aluminium. Scientific Reports, 2017, 7, 9729.	1.6	46
59	Identifying the Stages during Ultrasonic Processing that Reduce the Grain Size of Aluminum with Added Al3Ti1B Master Alloy. Advanced Engineering Materials, 2017, 19, 1700264.	1.6	24
60	Metal injection moulding of titanium and titanium alloys: Challenges and recent development. Powder Technology, 2017, 319, 289-301.	2.1	115
61	Grain refinement of wire arc additively manufactured titanium by the addition of silicon. Journal of Alloys and Compounds, 2017, 695, 2097-2103.	2.8	118
62	Ultrasound Assisted Casting of an AM60 Based Metal Matrix Nanocomposite, Its Properties, and Recyclability. Metals, 2017, 7, 388.	1.0	47
63	Grain Refinement in Alloys: Novel Approaches. , 2016, , .		0
64	The effect of the melt thermal gradient on the size of the constitutionally supercooled zone. IOP Conference Series: Materials Science and Engineering, 2016, 117, 012001.	0.3	5
65	The influence of Cu, Mg and Ni on the solidification and microstructure of Al-Si alloys. IOP Conference Series: Materials Science and Engineering, 2016, 117, 012022.	0.3	5
66	An Hydrogen Evolution Method for the Estimation of the Corrosion Rate of Magnesium Alloys. , 2016, , 565-572.		29
67	Grain Refinement of an Al-2 wt%Cu Alloy by Al3Ti1B Master Alloy and Ultrasonic Treatment. IOP Conference Series: Materials Science and Engineering, 2016, 117, 012050.	0.3	13
68	On grain coarsening and refining of the Mgâ€“3Al alloy by Sm. Journal of Alloys and Compounds, 2016, 663, 387-394.	2.8	28
69	Massive transformation in Tiâ€“6Alâ€“4V additively manufactured by selective electron beam melting. Acta Materialia, 2016, 104, 303-311.	3.8	155
70	The influence of ternary alloying elements on the Alâ€“Si eutectic microstructure and the Si morphology. Journal of Crystal Growth, 2016, 433, 63-73.	0.7	27
71	Recent advances in grain refinement of light metals and alloys. Current Opinion in Solid State and Materials Science, 2016, 20, 13-24.	5.6	222
72	Solidification of Cast Magnesium Alloys. , 2016, , 193-198.		3

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73	Grain Refinement of Magnesium. , 2016, , 247-254.		8
74	Hot Tearing in Aluminium â€" Copper Alloys. , 2016, , 895-899.		4
75	The Effect of Alloy Content on the Grain Refinement of Aluminium Alloys. , 2016, , 393-399.		3
76	An investigation of the mechanical behaviour of fine tubes fabricated from a Tiâ€“25Nbâ€“3Moâ€“3Zrâ€“2Sn alloy. Materials and Design, 2015, 85, 256-265.	3.3	22
77	Enhanced Heterogeneous Nucleation by Pulsed Magnetoâ€Oscillation Treatment of Liquid Aluminum Containing Al3Ti1B Additions. Advanced Engineering Materials, 2015, 17, 1465-1469.	1.6	13
78	Real-time synchrotron x-ray observations of equiaxed solidification of aluminium alloys and implications for modelling. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012014.	0.3	16
79	The Contribution of Constitutional Supercooling to Nucleation and Grain Formation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4868-4885.	1.1	123
80	Microstructure and Mechanical Properties of Long Ti-6Al-4V Rods Additively Manufactured by Selective Electron Beam Melting Out of a Deep Powder Bed and the Effect of Subsequent Hot Isostatic Pressing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 3824-3834.	1.1	99
81	A yttrium-containing high-temperature titanium alloy additively manufactured by selective electron beam melting. Journal of Central South University, 2015, 22, 2857-2863.	1.2	11
82	The influence of ternary Cu additions on the nucleation of eutectic grains in a hypoeutectic Al-10 wt.%Si alloy. Journal of Alloys and Compounds, 2015, 646, 699-705.	2.8	12
83	Controlling the microstructure and properties of wire arc additive manufactured Tiâ€“6Alâ€“4V with trace boron additions. Acta Materialia, 2015, 91, 289-303.	3.8	280
84	A real-time synchrotron X-ray study of primary phase nucleation and formation in hypoeutectic Alâ€“Si alloys. Journal of Crystal Growth, 2015, 430, 122-137.	0.7	45
85	Evolution of the microstructure and mechanical properties during fabrication of mini-tubes from a biomedical Î²-titanium alloy. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 42, 207-218.	1.5	16
86	The role of ultrasonic treatment in refining the as-cast grain structure during the solidification of an Alâ€“2Cu alloy. Journal of Crystal Growth, 2014, 408, 119-124.	0.7	108
87	The cold-rolling behaviour of AZ31 tubes for fabrication of biodegradable stents. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 292-303.	1.5	18
88	Nucleation and grain formation of pure Al under Pulsed Magneto-Oscillation treatment. Materials Letters, 2014, 130, 48-50.	1.3	53
89	The Interdependence model of grain nucleation: A numerical analysis of the Nucleation-Free Zone. Acta Materialia, 2013, 61, 5914-5927.	3.8	60
90	Hot Tear Susceptibility of Al-Mg-Si-Fe Alloys with Varying Iron Contents. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 5396-5407.	1.1	39

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91	Grain Refinement of Magnesium Alloys: A Review of Recent Research, Theoretical Developments, and Their Application. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2935-2949.	1.1	201
92	Real time synchrotron X-ray observations of solidification in hypoeutectic Alâ€“Si alloys. Materials Characterization, 2013, 85, 134-140.	1.9	34
93	Grain Refinement of Magnesium Alloys by Mgâ€“Zr Master Alloys: The Role of Alloy Chemistry and Zr Particle Number Density. Advanced Engineering Materials, 2013, 15, 373-378.	1.6	44
94	A Brief History of the Development of Grain Refinement Technology for Cast Magnesium Alloys. , 2013, , 3-8.		2
95	Observation and Prediction of the Hot Tear Susceptibility of Ternary Al-Si-Mg Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 3227-3238.	1.1	60
96	Influence of Chemical Composition of Mg Alloys on Surface Alloying by Diffusion Coating. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1621-1628.	1.1	21
97	Case studies in aluminium casting alloys. , 2011, , 185-216.		0
98	Grain Refinement in Alloys: Novel Approaches. , 2011, , 1-7.		5
99	Grain Morphology of As-Cast Wrought Aluminium Alloys. Materials Transactions, 2011, 52, 842-847.	0.4	28
100	Surface alloying of AZ91E alloy by Alâ€“Zn packed powder diffusion coating. Surface and Coatings Technology, 2011, 206, 425-433.	2.2	46
101	Processing considerations for cast Tiâ€“25Nbâ€“3Moâ€“3Zrâ€“2Sn biomedical alloys. Materials Science and Engineering C, 2011, 31, 1520-1525.	3.8	14
102	The Interdependence Theory: The relationship between grain formation and nucleant selection. Acta Materialia, 2011, 59, 4907-4921.	3.8	494
103	Corrosion of magnesium (Mg) alloys in engine coolants. , 2011, , 426-454.		1
104	The effect of boron on the refinement of microstructure in cast cobalt alloys. Journal of Materials Research, 2011, 26, 951-956.	1.2	16
105	Effect of Alloy Composition on the Dendrite Arm Spacing of Multicomponent Aluminum Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 1528-1538.	1.1	72
106	The effect of solute on ultrasonic grain refinement of magnesium alloys. Journal of Crystal Growth, 2010, 312, 2267-2272.	0.7	83
107	An analytical model for constitutional supercooling-driven grain formation and grain size prediction. Acta Materialia, 2010, 58, 3262-3270.	3.8	180
108	Effects of boron on microstructure in cast zirconium alloys. Journal of Materials Research, 2010, 25, 1695-1700.	1.2	14

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109	Titanium as an endogenous grain-refining nucleus. Philosophical Magazine, 2010, 90, 699-715.	0.7	20
110	The effect of aluminium content on the eutectic morphology of high pressure die cast magnesiumâ€“aluminium alloys. Journal of Alloys and Compounds, 2010, 492, L64-L68.	2.8	23
111	Laser Welding of Titanium and its Alloys for Medical Applications: Current Knowledge and Future Direction. Materials Science Forum, 2009, 618-619, 291-294.	0.3	5
112	Grain nucleation and formation in Mgâ€“Zr alloys. International Journal of Cast Metals Research, 2009, 22, 256-259.	0.5	40
113	Latest Developments in Understanding the Grain Refinement of Cast Titanium. Materials Science Forum, 2009, 618-619, 315-318.	0.3	7
114	Segregation and grain refinement in cast titanium alloys. Journal of Materials Research, 2009, 24, 1529-1535.	1.2	64
115	The Loss of Dissolved Zirconium in Zirconium-Refined Magnesium Alloys after Remelting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 2470-2479.	1.1	51
116	Beryllium as a grain refiner in titanium alloys. Journal of Alloys and Compounds, 2009, 481, L20-L23.	2.8	113
117	Improved prediction of the grain size of aluminum alloys that includes the effect of cooling rate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 486, 8-13.	2.6	123
118	Subsurface Deformation After Dry Machining of Grade 2 Titanium. Advanced Engineering Materials, 2008, 10, 85-88.	1.6	18
119	The mechanism of grain refinement of titanium by silicon. Scripta Materialia, 2008, 58, 1050-1053.	2.6	111
120	Potency of high-intensity ultrasonic treatment for grain refinement of magnesium alloys. Scripta Materialia, 2008, 59, 19-22.	2.6	215
121	Grain-refinement mechanisms in titanium alloys. Journal of Materials Research, 2008, 23, 97-104.	1.2	165
122	Investigation into the effect of nucleation parameters on grain formation during solidification using a cellular automaton-finite control volume method. Journal of Materials Research, 2008, 23, 2312-2325.	1.2	5
123	Modeling of grain refinement: Part I. Effect of the solute titanium for aluminum. Journal of Materials Research, 2008, 23, 1282-1291.	1.2	6
124	Modeling of grain refinement: Part III. Alâ€“7Siâ€“0.3Mg aluminum alloy. Journal of Materials Research, 2008, 23, 1301-1306.	1.2	9
125	Modeling of grain refinement: Part II. Effect of nucleant particlesâ€”TiB2 additions for aluminum. Journal of Materials Research, 2008, 23, 1292-1300.	1.2	6
126	New approach to analysis of grain refinement. International Journal of Cast Metals Research, 2007, 20, 131-135.	0.5	18

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127	Degradation of the surface appearance of magnesium and its alloys in simulated atmospheric environments. Corrosion Science, 2007, 49, 1245-1265.	3.0	51
128	A Rationale for the Acoustic Monitoring of Surface Deformation in Ti6Al4V Alloys during Machining. Advanced Engineering Materials, 2007, 9, 1000-1004.	1.6	10
129	A New Analytical Approach to Reveal the Mechanisms of Grain Refinement. Advanced Engineering Materials, 2007, 9, 739-746.	1.6	63
130	The Accurate Determination of Heat Transfer Coefficient and its Evolution with Time During High Pressure Die Casting of Alâ€9â€‰%Siâ€3â€‰%Cu and Mgâ€9â€‰%Alâ€1â€‰%Zn Alloys. Advanced Engineering Materials, 2007, 9, 995-999.	1.6	25
131	Mechanism for grain refinement of magnesium alloys by superheating. Scripta Materialia, 2007, 56, 633-636.	2.6	92
132	Modelling of grain size transition with alloy concentration in solidified Alâ€“Si alloys. Journal of Materials Science, 2007, 42, 9756-9764.	1.7	8
133	Determination of Strain during Hot Tearing by Image Correlation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 2503-2512.	1.1	32
134	Effect of manganese on grain refinement of Mgâ€“Al based alloys. Scripta Materialia, 2006, 54, 1853-1858.	2.6	116
135	Heterogeneous nucleation of Mgâ€“Al alloys. Scripta Materialia, 2006, 54, 2197-2201.	2.6	72
136	Observation of crack initiation during hot tearing. International Journal of Cast Metals Research, 2006, 19, 59-65.	0.5	50
137	Effect of solute on the growth rate and the constitutional undercooling ahead of the advancing interface during solidification of an alloy and the implications for nucleation. Journal of Materials Research, 2006, 21, 2470-2479.	1.2	18
138	Corrosion Behaviour of the Microstructural Constituents of AZ Alloys. , 2006, , 423-431.		1
139	A New Zirconium-Rich Master Alloy for the Grain Refinement of Magnesium Alloys. , 2005, , 706-712.		6
140	Grain refinement efficiency and mechanism of aluminium carbide in Mgâ€“Al alloys. Scripta Materialia, 2005, 53, 517-522.	2.6	135
141	Native grain refinement of magnesium alloys. Scripta Materialia, 2005, 53, 841-844.	2.6	116
142	Corrosion of magnesium alloys in commercial engine coolants. Materials and Corrosion - Werkstoffe Und Korrosion, 2005, 56, 15-23.	0.8	70
143	The corrosion performance of magnesium alloy AM-SC1 in automotive engine block applications. Jom, 2005, 57, 54-56.	0.9	26
144	An analysis of the relationship between grain size, solute content, and the potency and number density of nucleant particles. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 1911-1920.	1.1	316

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145	Corrosion behaviour of a pressure die cast magnesium alloy. International Journal of Cast Metals Research, 2005, 18, 174-180.	0.5	23
146	Heterogeneous nuclei size in magnesiumâ€"zirconium alloys. Scripta Materialia, 2004, 50, 1115-1119.	2.6	90
147	Effect of iron on grain refinement of high-purity Mgâ€"Al alloys. Scripta Materialia, 2004, 51, 125-129.	2.6	93
148	Grain coarsening of magnesium alloys by beryllium. Scripta Materialia, 2004, 51, 647-651.	2.6	26
149	Morphological features of interfacial intermetallics and interfacial reaction rate in Al-11Si-2.5Cu-(0.15/0.60)Fe cast alloy/die steel couples. Journal of Materials Science, 2004, 39, 519-528.	1.7	21
150	Corrosion resistance of aged die cast magnesium alloy AZ91D. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 366, 74-86.	2.6	399
151	Evaluation of the BEASY program using linear and piecewise linear approaches for the boundary conditions. Materials and Corrosion - Werkstoffe Und Korrosion, 2004, 55, 845-852.	0.8	52
152	Semisolid microstructural evolution of AlSi7Mg alloy during partial remelting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 368, 159-167.	2.6	44
153	Uptake of iron and its effect on grain refinement of pure magnesium by zirconium. Materials Science and Technology, 2004, 20, 585-592.	0.8	33
154	Corrosion behaviour of magnesium in ethylene glycol. Corrosion Science, 2004, 46, 1381-1399.	3.0	131
155	Galvanic corrosion of magnesium alloy AZ91D in contact with an aluminium alloy, steel and zinc. Corrosion Science, 2004, 46, 955-977.	3.0	292
156	Alloying of pure magnesium with Mg 33.3 wt-%Zr master alloy. Materials Science and Technology, 2003, 19, 156-162.	0.8	47
157	Modelling of microstructure formation and evolution during solidification. International Journal of Cast Metals Research, 2003, 15, 219-223.	0.5	5
158	Method for determining reaction rate of mild steel containers during melting of magnesium-aluminium alloys and effect of aluminium content on directionally solidified microstructures. International Journal of Cast Metals Research, 2003, 16, 427-433.	0.5	2
159	The effect of zirconium grain refinement on the corrosion behaviour of magnesium-rare earth alloy MEZ. Journal of Light Metals, 2002, 2, 1-16.	0.8	213
160	Effect of a short solution treatment time on microstructure and mechanical properties of modified Alâ€"7wt.%Siâ€"0.3wt.%Mg alloy. Journal of Light Metals, 2002, 2, 27-36.	0.8	141
161	Characteristic zirconium-rich coring structures in Mgâ€"Zr alloys. Scripta Materialia, 2002, 46, 649-654.	2.6	129
162	Halo formation in directional solidification. Acta Materialia, 2002, 50, 2837-2849.	3.8	31

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163	Effect of melt cleanliness on the formation of porosity defects in automotive aluminium high pressure die castings. Journal of Materials Processing Technology, 2002, 122, 82-93.	3.1	43
164	Development of the as-cast microstructure in magnesiumâ€"aluminium alloys. Journal of Light Metals, 2001, 1, 61-72.	0.8	396
165	Settling of undissolved zirconium particles in pure magnesium melts. Journal of Light Metals, 2001, 1, 157-165.	0.8	78
166	A practical method for identifying intermetallic phase particles in aluminium alloys by electron probe microanalysis. Journal of Light Metals, 2001, 1, 187-193.	0.8	15
167	A model of grain refinement incorporating alloy constitution and potency of heterogeneous nucleant particles. Acta Materialia, 2001, 49, 1867-1878.	3.8	473
168	The effect of solidification rate on the structure of magnesium-aluminium eutectic grains. International Journal of Cast Metals Research, 2000, 13, 1-7.	0.5	16
169	An empirical analysis of trends in mechanical properties of T6 heat treated Al-Si-Mg casting alloys. International Journal of Cast Metals Research, 2000, 12, 419-430.	0.5	23
170	The effect of grain refinement on the formation of casting defects in alloy 356 castings. International Journal of Cast Metals Research, 2000, 12, 393-408.	0.5	32
171	Corrosion performance of magnesium alloys MEZ and AZ91. International Journal of Cast Metals Research, 2000, 12, 327-334.	0.5	24
172	New apparatus for characterising tensile strength development and hot cracking in the mushy zone. International Journal of Cast Metals Research, 2000, 12, 441-456.	0.5	57
173	The shear behaviour of partially solidified Alâ€"Siâ€"Cu alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 289, 18-29.	2.6	48
174	The role of solute in grain refinement of magnesium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2000, 31, 2895-2906.	1.1	646
175	Partitioning of titanium during solidification of aluminium alloys. Materials Science and Technology, 2000, 16, 993-1000.	0.8	35
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